doctor who is not cognizant of its value. And yet within the past few months I have been called to treat diphtheria in the families of two doctors, and have learned from a score or more of others that they have neglected to use or had failed to appreciate the value of this magnificent agent which is now at our command for the prevention of diphtheria.

Now, Mr. Doctor, if you are one of the derelicts, get busy at once and immunize your children and the children of your patients.

OSCAR REISS, Los Angeles.

Neurosurgery

Dalliative Neurosurgical Methods—As custodians of the public health physicians have a threefold responsibility, namely, the prevention and the cure of disease and, thirdly, the relief of suffering. Our attention and interests as regards prophylactic and curative measures should not overshadow the problem of those suffering from incurable maladies. Only too frequently when the decision has been made that specific therapeutic measures are not indicated we lose interest in the case although our sympathy for the patient may be great. Nothing is more trying than the care of a patient with an incurable disease who suffers great pain. Frequently these patients live a long time, and any measure that will make their last days more comfortable is a welcome addition to our therapeutic armamentarium.

Pain is the chief cause of discomfort. Morphin and the other narcotics are resorted to in order that the patient may be fairly comfortable. Surely no one can criticize the use of narcotics in such cases, but unfortunately the patient is frequently in a worse physical and mental state because of their use. The narcotic habit should be avoided if possible in any patient who is not entirely incapacitated because of disease, or one whose expectancy of life is longer than six months.

Primary malignant tumors or their metastases are a common cause of severe pain. The following surgical measures have proved efficacious for the relief of pain.

Tumors of the face, sinuses, or neck frequently involve branches of the cervical or cranial nerves. If the pain is confined to the face and head, resection of the sensory root of the gasserian ganglion will give relief. The operation is the one done so successfully for the relief of tic douloureux. Temple Fay has reported several cases of carcinoma of the face and neck in which relief of pain was obtained by a cervical rhizotomy. In some few cases the combined operation of avulsion of the gasserian sensory root and cervical rhizotomy are necessary if the lesion and pain are widespread.

Malignant growths of the pelvic contents and metastatic growths to the vertebral column frequently cause severe and intractable pain. If the patient has a paralysis of both legs, injection of alcohol into or section of the cord above the lesion may be considered. In those cases where the motor disability is absent or slight, section of the antero-

lateral columns of the cord is recommended. This operation, so-called cordotomy, has been used sufficiently to establish its definite worth. It has also been used in cases of severe pain of the abdomen or lower extremities due to lues and other nonmalignant disease when the pain cannot be controlled by specific therapy. Max Peet in a recent article reviews the history of this operative procedure, and published nineteen cases of his own. The series includes three cases of primary malignancy of the spine, three of tabes dorsalis, two of myelitis, two of carcinoma of the rectum, one of carcinoma of the cecum, one of carcinoma of the uterus, one carcinoma of the breast, one sarcoma of the thigh, and one shell wound of the sciatic nerve in the pelvis. Most of the malignant cases had metastases of the spine or involvement of the pelvic glands with pressure on the lumbosacral plexus. A satisfactory relief of pain was obtained in fourteen cases and partial relief in five.

These operations are not shocking ones, but should be reserved for patients in fairly good condition whose expectancy of life is at least several months.

Howard W. Fleming, San Francisco.

Urology

Bladder Neck Contracture—Bladder neck contracture or median bar formation at the bladder neck was first elaborated upon by Young in 1911.¹ This is a condition in which there is obstruction to urinary outflow at the bladder neck, due to a fibrous condition of the prostate causing either a ring contracture of the entire bladder neck, or encroachment upon the bladder neck at some point, usually posteriorly. When this occurs posteriorly it is spoken of as a median bar, and is due to a fibrous enlargement of the middle lobe of the prostate causing obstruction by its projection into the internal urethral orifice.

In his excellent work on urology, published late in 1926, Hugh Young ¹ discussed this condition in detail. The symptoms of which the patients complain, named in order of their frequency of occurrence are: (1) frequency of urination; (2) pain located in (a) urethra, (b) bladder neck, (c) end of penis, (d) perineum, or (e) suprapubic; (3) difficulty of urination; (4) small stream; (5) weak force; (6) urgency; (7) occasional complete retention; (8) incontinence; (9) sudden stoppage; (10) complete retention; and (11) urination incomplete.

The residual urine found is as a rule less than that found in cases of prostatic hypertrophy, the average being from 25 to 50 cc. There may be no residual urine, or there may be as high as 1000 cc.

By rectal palpation the prostate varies from a small, atrophic condition to an enlargement which could be mistaken for an adenomatous hypertrophy. The diagnosis is made mainly by cystoscopic examination. The cystoscope, after being introduced, is held firmly, as in a vise, at the bladder neck. The thickened bladder neck can be palpated between the

^{1.} Young's Practice in Urology, Vol. 2, Ed. 1926, pp. 481-512.